Military Marking for Shipment and Storage MIL-STD-129P W/Change 4

Presented By:

DCMAC-JP

Revision 5, 14 Nov 2007

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Defense Contract Management Agency

Agenda

- Basic Definitions
- Identification Markings
- Military Shipment Label
- Radio Frequency Identification (RFID)
- Special Markings
- Documentation
- Hazardous Materials
- Ammunition and Explosives
- Summary
- Quiz

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Basic Definitions

- **Marking is the application of numbers, letters, labels, tags, symbols or colors to provide identification & to expedite handling during shipment & storage**

- **Before we take a look at the details of the package markings, let's define some of the important data elements required to properly identify a package in the Military Distribution System**

Basic Definitions

National Stock Number or NSN, in its most basic form,

consists of 13 digits, divided into two parts:

- **Federal Supply Class (FSC)– The first four digits of the NSN identify the type of item (e.g. 2610 – tires & tubes, 8115 – boxes, cartons and crates)**

- **National Item Identification Number (NIIN) – The last nine digits of the NSN are the NIIN, the first two digits identify the country assigning the NSN (“00” & “01” – US) the remaining seven digits are uniquely assigned**

6625-01-248-9073

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Basic Definitions

- **Commercial & Government Entity (CAGE) Code is a five digit alpha-numeric code applicable to all activities that have produced or are producing items used by the Federal Government. The first and fifth positions are numeric.**

- **The Defense Logistics Information Service (DLIS), Battle Creek, MI is the authorized source of CAGE Codes**

Basic Definitions

- **Part Number (PN or P/N) is an identification assigned by the original design activity for the purpose of uniquely identifying a specific item. A Part Number is usually the same as, or based on, the controlling drawing number.**

- **Radio Frequency Identification (RFID) is an automatic identification & data capture technology comprised of one or more reader/interrogators & one or more RF transponders in which data transfer is achieved by means of suitably modulated inductive or radiated electromagnetic carriers.**

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Basic Definitions

- **Item Unique Identification (IUID) A system of establishing unique item identifiers within the DoD by assigning a machine-readable character string or number to a discrete item, which serves to distinguish it from other like and unlike items.**

- **Unique Item Identifier (UII) The set of data elements marked on an items that is globally unique, unambiguous and robust enough to ensure data information quality throughout life and to support multi-faceted business applications and users.**

- **Concatenated UII The string of UII data set elements linked into a single data element.**

Basic Definitions

- **Unit of Issue (UI) – A standard or basic quantity that is expressed as a unit & indicated in the contract**
  - **Definitive Unit of Issue – indicates exact quantity of volume, measurement, weight or count**
    - **EA = Each**
    - **AY = Assembly**
    - **PR = Pair**
    - **DZ = Dozen**
  - **Nondefinitive Unit of Issue – does not indicate an exact quantity & therefore must be accompanied by a quantitative expression**
    - **PG = Package (10 EA)**
    - **RO = Roll (50 FT)**
    - **BX = Box (6 PR)**
    - **LG = Length (20 FT)**

Basic Definitions

- **Contract Number or Purchase Order Number – The acquisition instrument identification number appearing on the acquisition document**

- **The standard format is a follows:**
  - **The first six digits identify the office issuing the contract (DODAAC)**
  - **The seventh & eighth digits are the last two digits of the fiscal year**
  - **The ninth digit indicates the type of contract**
  - **The tenth through thirteenth digits are a serial number**

SP0450-07-M-2187

Basic Definitions

- **Preservation is the process & procedures used to protect material against corrosion, deterioration & physical damage during shipment, handling & storage. It includes cleaning drying, preservative materials, barrier materials, cushioning & containers.**
- **Military Preservation Methods are applied to protect the item & are codified I/A/W MIL-STD-2073-1D.**
- **Military Preservation Method Codes represent the basic preservation methods (10, 20, 30, 40, 50, etc) & the specialized methods as well (AE, DW, GX, etc)**

Basic Definitions

- **Now that we have a handle on the data elements that comprise the general package markings, let's take a look at the machine readable language that has become an indispensable link in the logistics pipeline – Bar Codes**
- **Today there are two general families of bar codes in use – both commercially & in the Military system**
  - **Linear**
  - **Two Dimensional – 2D**

Basic Definitions

Linear Bar Codes

- **Code 39 or 3 of 9 – Originall adopted by DOD in 1982**
  - **ISO/IEC 16388**

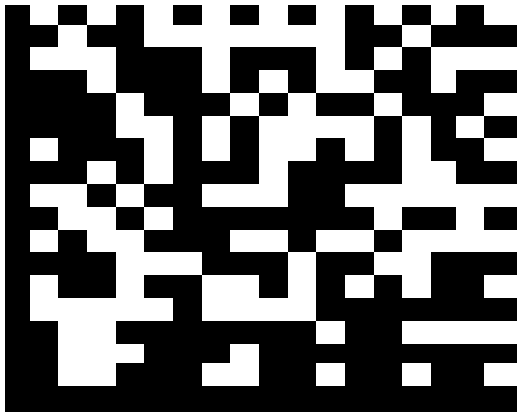
- **Universal Product Code – UPC – U.S. retail industry standard since 1973**
  - **ISO/IEC 15420**

Basic Definitions

2D Symbols

- **PDF417 – Identification Data, UII, Military Shipment Label & Ammunition markings**
  - **ISO/IEC 15438**

- **Data Matrix – MIL-STD-130 IUID markings**
  - **ISO/IEC 16022**



Identification Markings

- **Unit Container -** **First tie wrap or container applied to a single item or a quantity thereof, or a group of items of a single stock number.**
- **Intermediate Container – A wrap, box or bundle containing two or more unit packs of identical items.**
- **Exterior Containers – A container, bundle or assembly that is sufficient by reason of material, design & construction to protect unit packs and intermediate containers & their contents during shipment and storage.**

Identification Markings

Unit/Intermediate Containers

- National Stock Number
- CAGE Code (CAGE)
- Part Number (PN or P/N)
- Item Description or Nomenclature
- Quantity & Unit of Issue
- Contract Number & Lot Number
- Military Method & Date of Unit Preservation (M41-12/07)
- Serial Number (SER NO) when assigned

Identification Markings

Unit Packs & Intermediate Container Linear (Code 39) Bar Code Requirements:

- **NSN – Only the basic 13 digits - not dashes, spaces, prefixes or suffixes**
- **Serial Number(s) - when assigned**
- **Standard linear bar code density range should be from 3.0 to 9.4 characters per inch (CPI)**
- **When the unit pack is used as the exterior container, only the exterior container bar codes shall be applied**

Identification Markings

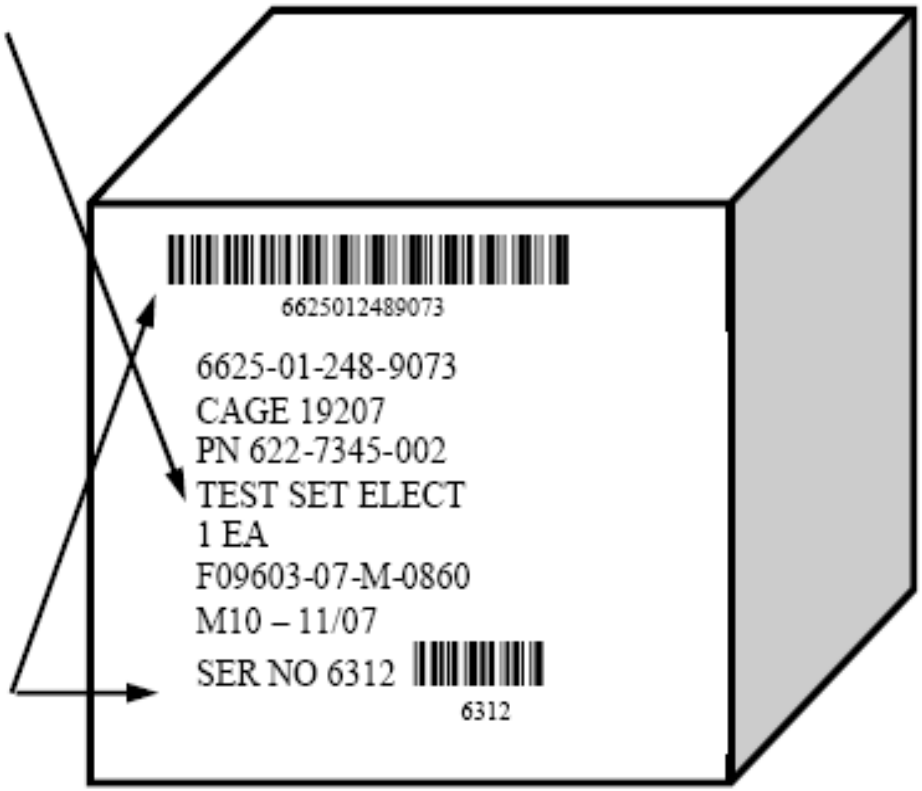
Unit & Intermediate Containers with linear (Code 39) bar codes

 # 1 - IDENTIFICATION MARKINGS

- NATIONAL STOCK NUMBER
- CAGE CODE
- PART NUMBER
- ITEM DESCRIPTION
- QUANTITY AND UNIT OF ISSUE
- CONTRACT NUMBER & LOT NUMBER
- MILITARY METHOD & DATE OF UNIT PRESERVATION
- SERIAL NUMBER (WHEN ASSIGNED)

#2 - BAR CODES

- NATIONAL STOCK NUMBER (NSN)
- SERIAL NUMBER (WHEN ASSIGNED)



Identification Markings

Unit Packs & Intermediate Container 2D (PDF417) Symbol Requirements:

- **NSN – Only the basic 13 digits encoded with Data Identifier “N”**
- **Serial Number(s) Encoded with Data Identifier “S”**
- **UII(s) – The concatenated UII(s) should be encoded using Data Identifier “25S”**
- **The 2D symbol should be located in close proximity to the identification markings**

Identification Markings

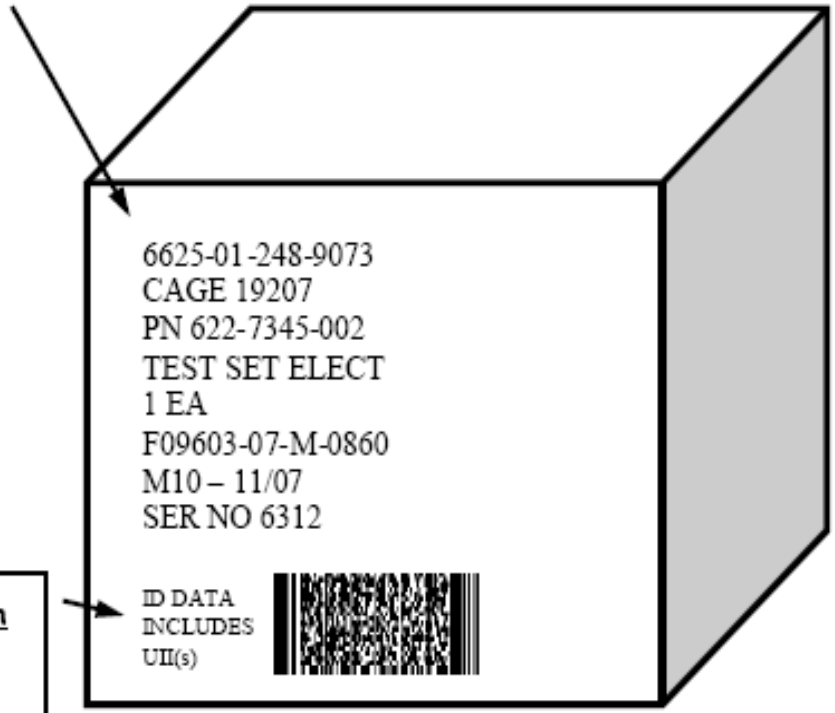
Unit & Intermediate Containers with 2D (PDF417) symbol

 # 1 - IDENTIFICATION MARKINGS

- NATIONAL STOCK NUMBER
- CAGE CODE
- PART NUMBER
- ITEM DESCRIPTION
- QUANTITY AND UNIT OF ISSUE
- CONTRACT NUMBER & LOT NUMBER
- MILITARY METHOD & DATE OF UNIT PRESERVATION
- SERIAL NUMBER

#2 - 2D (PDF417) Symbol Data with (Data Identifiers)

- NATIONAL STOCK NUMBER (N)
- SERIAL NUMBER (S)
- UNIQUE ITEM IDENTIFIER (25S)



Identification Markings

Placement of Identification Markings on Unit & Intermediate Packs:

- **Located to allow for easy reading**
- **Insure markings will not be destroyed if container is opened for inspection**
- **Mark on outer wrap, bag, or container of the unit pack**
- **If a bag is used in a unit container, both the bag & the unit container must be marked**

Identification Markings

Exterior Containers

- National Stock Number
- CAGE Code (CAGE)
- Part Number (PN or P/N)
- Quantity & Unit of Issue
- Contract Number & Lot Number
- Military Method & Date of Unit Preservation
- Gross Weight (WT)
- Serial Number(s) (SER NO) when assigned

Identification Markings

Exterior Container Linear (Code 39) Bar Codes

- **NSN – Only the basic 13 digits**
- **Contract Number- Including the Delivery Order Number if applicable (no dashes)**
- **CAGE Code**
- **Serial Numbers - when assigned**
- **Contract Line item Number (CLIN) – encoded using six characters zero filled to the left**
- **Contractor Shipment Number – Seven or eight characters**

Identification Markings

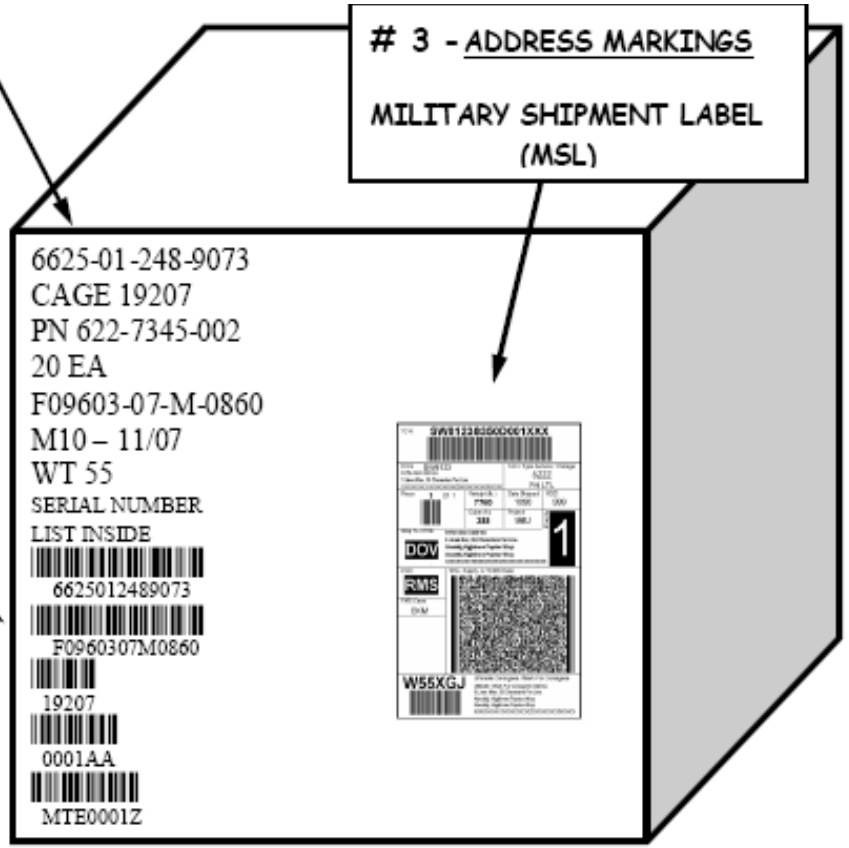
Exterior Container with linear (Code 39) bar codes

 # 1 - IDENTIFICATION MARKINGS

- NATIONAL STOCK NUMBER
- CAGE CODE
- PART NUMBER
- QUANTITY AND UNIT OF ISSUE
- CONTRACT NUMBER & LOT NUMBER
- MILITARY METHOD &
- DATE OF UNIT PRESERVATION
- WEIGHT (LBS)
- SERIAL NUMBER(S)

 # 2 - LINEAR BAR CODES

- NATIONAL STOCK NUMBER
- CONTRACT NUMBER
- CAGE CODE
- CONTRACT LINE ITEM NUMBER (CLIN)
- CONTRACTOR SHIPMENT NUMBER
- SERIAL NUMBER (List inside)



Identification Markings

Exterior Container 2D (PDF417) Symbol data Requirements:

- **NSN – Only the basic 13 digits – “N”**
- **Contract Number- w/ Delivery Order Number – “8K”**
- **CAGE Code – “17V”**
- **Serial Number(s) - when assigned – “S”**
- **Contract Line item Number (CLIN) – “4K”**
- **Contractor Shipment Number – “5K”**
- **UII – “25S”**

Identification Markings

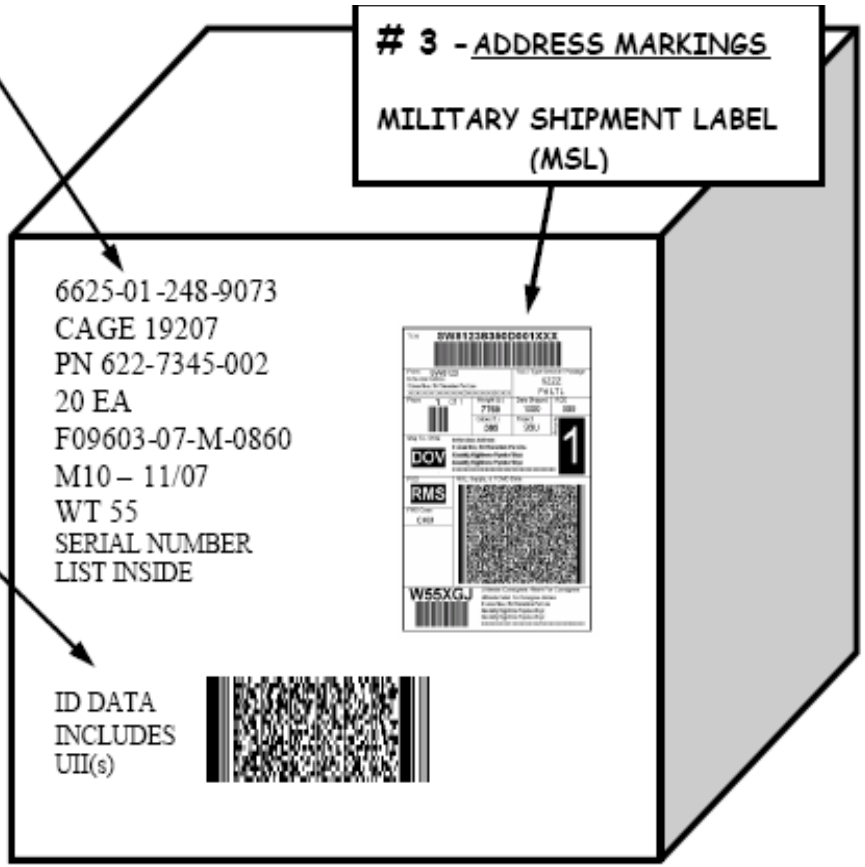
Exterior Container with 2D (PDF417) Symbol

 # 1 - IDENTIFICATION MARKINGS

- NATIONAL STOCK NUMBER
- CAGE CODE
- PART NUMBER
- QUANTITY AND UNIT OF ISSUE
- CONTRACT NUMBER & LOT NUMBER
- MILITARY METHOD & DATE OF UNIT PRESERVATION
- WEIGHT (LBS)
- SERIAL NUMBER(S)

 # 2 - 2D (PDF417) Symbol Data with (Data Identifiers)

- NATIONAL STOCK NUMBER (N)
- CONTRACT NUMBER (8K)
- CAGE CODE (17V)
- CONTRACT LINE ITEM NUMBER (4K)
- CONTRACTOR SHIPMENT NUMBER (5K)
- SERIAL NUMBER(s) (S)
- UNIQUE ITEM IDENTIFIER (25S)



Identification Markings

Placement of Identification Markings on Exterior Containers

- **Apply to the upper left two-thirds of the largest side of the container**
- **Capital letters of equal height largest size practical for the package & not less than 3/32 of an inch high**
- **Containers over 10 cubic ft. shall be marked & bar coded on two adjacent sides**
- **All additional markings should be placed on the identification side**

Identification Markings

Methods of Marking Packs

- **Markings must be clear, legible, durable, & non-fading**
- **Machine printing preferred, but hand-printing permitted, except for ammo**
- **Pressure-sensitive labels may be used for all containers. Wood containers must be prepared to ensure adhesion**
- **Lettering shall be capital letters, equal height, proportionate to available space**
- **Exterior labels must be waterproofed**

Military Shipment Label

- **No longer DD Form 1387**
- **Required for all shipments unless otherwise specified in the contract**
- **Format is in accordance with MHIA MH 10.8.1**
- **Linear bar code is code 39**
  - **ISO/IEC 16388**
- **2-D bar code is PDF417**
  - **ISO/IEC 15438**

Military Shipment Label

- **Linear bar coded data elements**
  - **Transportation Control Number (TCN)**
  - **Piece Number**
  - **Ultimate Consignee DODAAC**
- **Data identifiers are not included**

Military Shipment Label

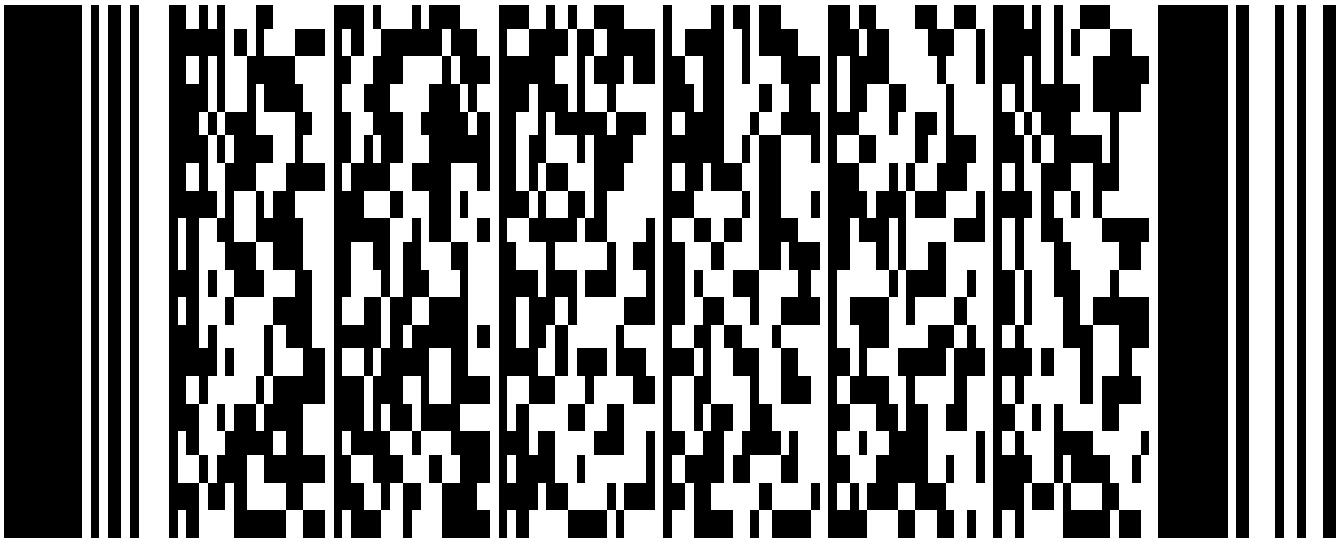
- **MSL Linear bar code format**
  - **Code 3 of 9 or 39 - ISO/IEC 16388**
  - **Data limited to about 30 characters**

Military Shipment Label

- 2-D bar coded data elements
  - Shipment Data
    - Information included in the clear on the MSL
  - TCMD
    - Applicable to shipments that move through the DTS
  - Line Item Supply Data
    - Requisition , NSN, RIC, Unit of Issue, Quantity, Condition Code and Unit Price
  - Data Identifiers must be included

Military Shipment Label

- **MSL 2-D bar code format**
  - **PDF417 - ISO/IEC 15438**
  - **Can contain up to 1,000 characters within the symbol**



Military Shipment Label

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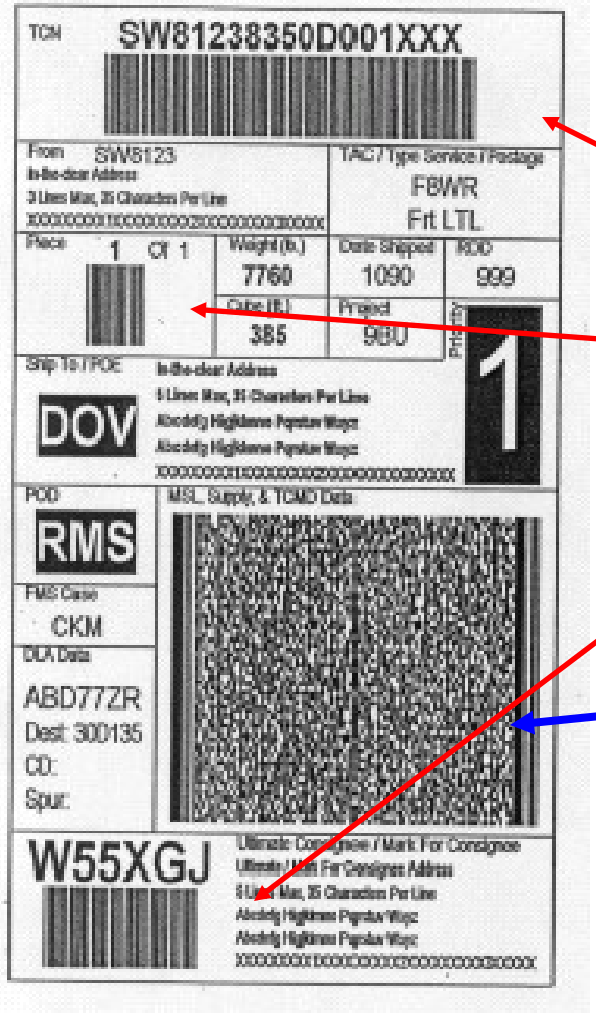


Requires Bar Coding

- Code 39 (Linear)
  - TCN
  - Piece Number
  - Ultimate Consignee DODAAC
- PDF417 (2D)
  - Shipment
  - Line Item
  - TCMD Data

Military Shipment Label

MSL Software Sources Include:

- **CATT Asset-Trak**

  http://asset-trak.com/atmain.htm

- **Distribution Planning and Management System (DPMS) DLA Contractors**
  - **http://www.ddc.dla.mil/dpms/**

- **Various commercial sources**
  - **EasySoft http://www.easysoftcorp.com/**
  - **Mil Pac http://www.milpac.com/index.html**

- **Many of the Military Packaging Contractors provide bar code labels including the MSL**

Radio Frequency Identification

Some definitions specific to RFID implementation

- **463L Pallet System – Aircraft pallets, nets, tie down & coupling devices designed to interface with aircraft cargo restraint systems. (Intended to differentiate between a standard palletized load & the 463L)**
- **Case – It is either an exterior container within a palletized unit load or it is an individual shipping container**
- **Content Level Detail – Data elements that describe the asset or item being shipped & the associated shipment configuration**
- **Electronic Product Code – EPC – An identification scheme for universally identifying physical objects via radio frequency**
- **RFID – Automatic identification & data capture technology in which data transfer is achieved by means of radio waves**

Radio Frequency Identification

- **RFID will be used in accordance with the Supplier Implementation Plan at:**

  http://www.acq.osd.mil/log/rfid/index.htm

- **Tags will be applied to case shipments & palletized unit loads.**

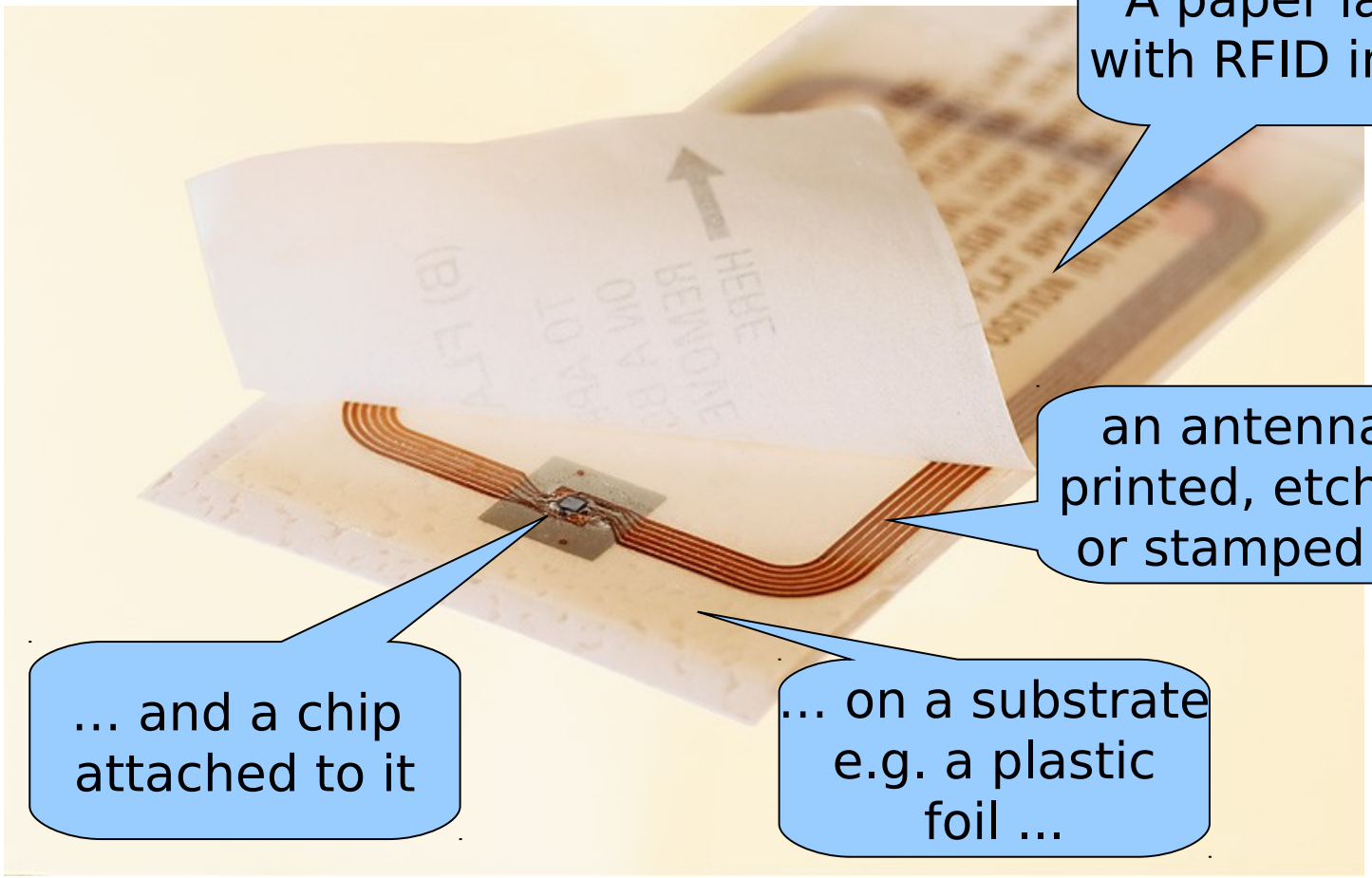
- **Shipments to CONUS Defense Distribution Depots & Military Aerial Ports – Charleston, Norfolk and Travis**

- **Bulk commodities shall not be tagged**

Radio Frequency Identification

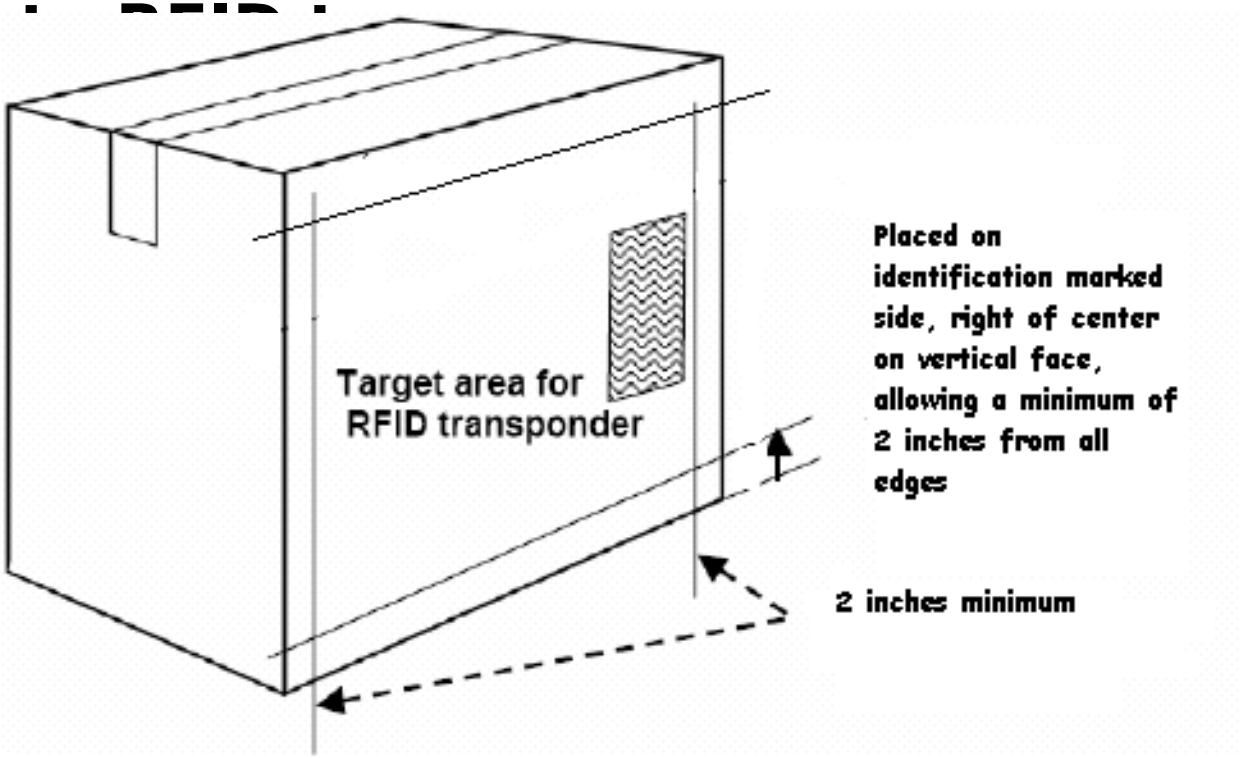
- **RFID tag formats for data constructs are located in the DoD Suppliers' Passive RFID Information Guide**
- **Passive RFID tags will comply with EPCglobal Class 1 Generation 2 specifications**
- **Frequency range for passive RFID tags is 860 – 960 MHz**
- **Munitions & explosives shall not be tagged until certification requirements are met**

Radio Frequency Identification


A paper label with RFID inside
an antenna, printed, etched or stamped ...
... and a chip attached to it
... on a substrate e.g. a plastic foil ...

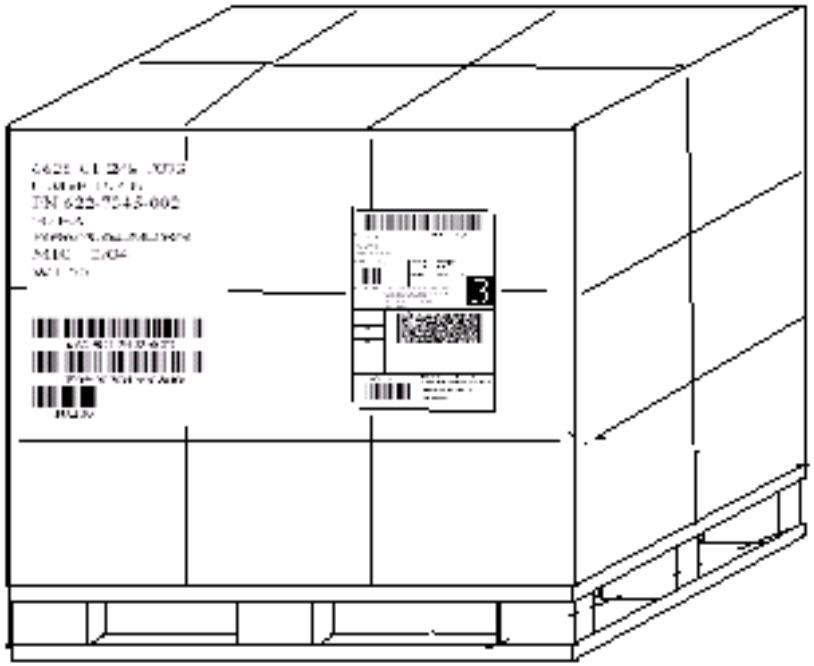
Radio Frequency Identification

- **Passive RFID tags may be integrated into the MSL**
- **Placement of RFID enabled address labels or sepa**


Target area for
RFID transponder
Placed on identification marked side, right of center on vertical face, allowing a minimum of 2 inches from all edges
2 inches minimum

Radio Frequency Identification

- **Identification markings may be applied directly to smooth containers or to marking boards securely attached to two adjacent**



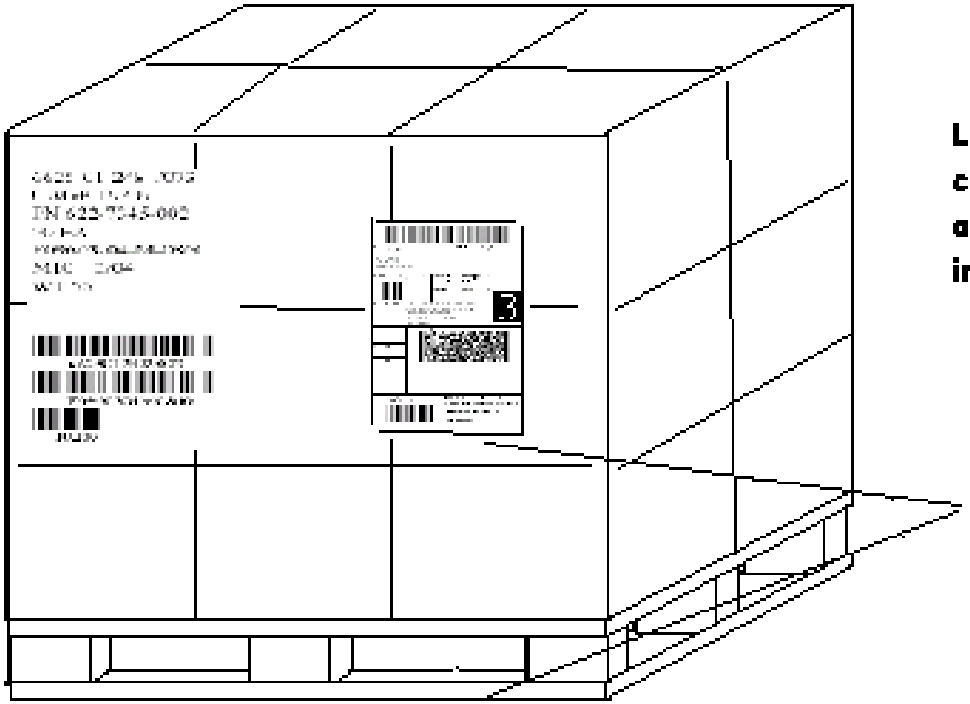
Unit loads of boxed items should have one or more boxes turned to present a blank surface for marking. Markings should extend from one container to another.

If over ten cubic feet, additional identification markings shall be placed on adjacent end

Size of the lettering shall not be less than 3/4 of an inch in height

Radio Frequency Identification

- **Address labels may be attached to the marking board or to the stretch wrap if used to bond the load**

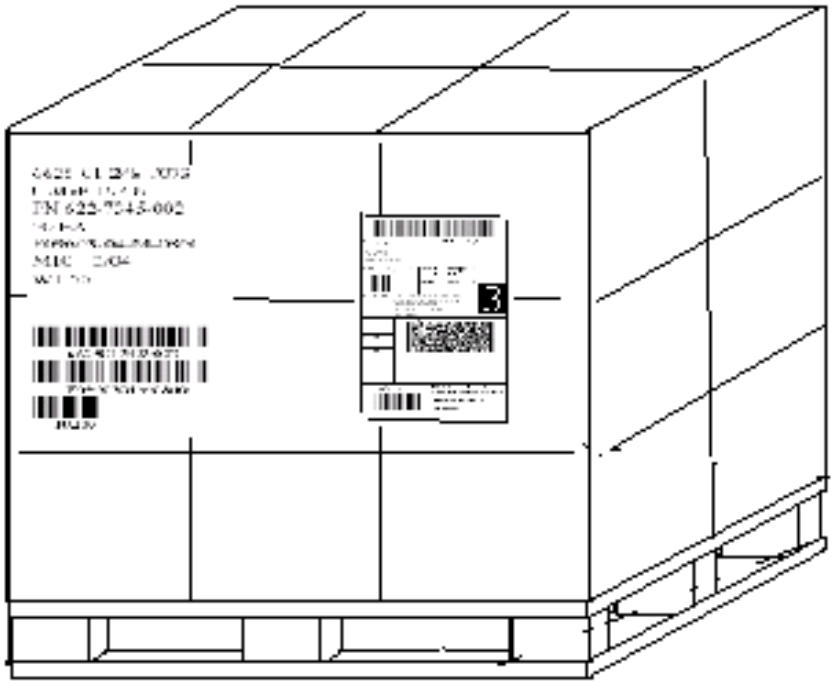


Label shall be placed right of center on a vertical face allowing a minimum of 2 inches from all edges

Bottom of label should be between 32 to 48 inches from the bottom of the pallet, but not closer than 2 inches to the top of the load

Radio Frequency Identification

- **RFID tags should be affixed at a suitable location where there is minimum risk of damage, easy access to the bar code symbols and the highest potential for successful RFID tag interrogation**



The RFID-enabled label for a palletized unit load should not be attached to an exterior container if the cargo within the exterior container will not be removed for receipt processing and storage

The RFID label should not be placed in a manner that overlaps any other existing RF transponder. There should be at least a 4 inch separation.

Radio Frequency Identification

- **Advance Shipment Notice (ASN) transactions in the form of EDI, web-based or user defined format via Wide Area Workflow (WAWF).**
- **Information that describes the contents and configuration of a shipment including:**

Contract Information	**Product description**	**RFID Tag**
Contract Number	**Line Item Number**	**RFID Tag Number**
Shipment Number	**Item Description**	**Line Item Number**
Prime Contractor	**NSN**	
Quantity	**Shipment Date**	**Quantity**

Special Markings

- Shelf-life
- Project Code
- Fragile/ Delicate
- Method 50
- Expedited Handling
- Electrostatic Discharge Sensitive (ESD)

Special Markings

Shelf-life

- **Items that have a limited timeframe that they can be kept in storage & still be suitable for issue**
- **Typical Shelf Life managed items include food, medicine, batteries, paints, adhesives, hoses, belts, o-rings**
- **Shown below identification data on unit, intermediate & exterior containers**

TYPE I (non-extendable):

MFD DATE 10/01
EXP DATE 10/06

TYPE II (extendable):

ASSEMBLED DATE 10/01
INSP/TEST DATE 10/04

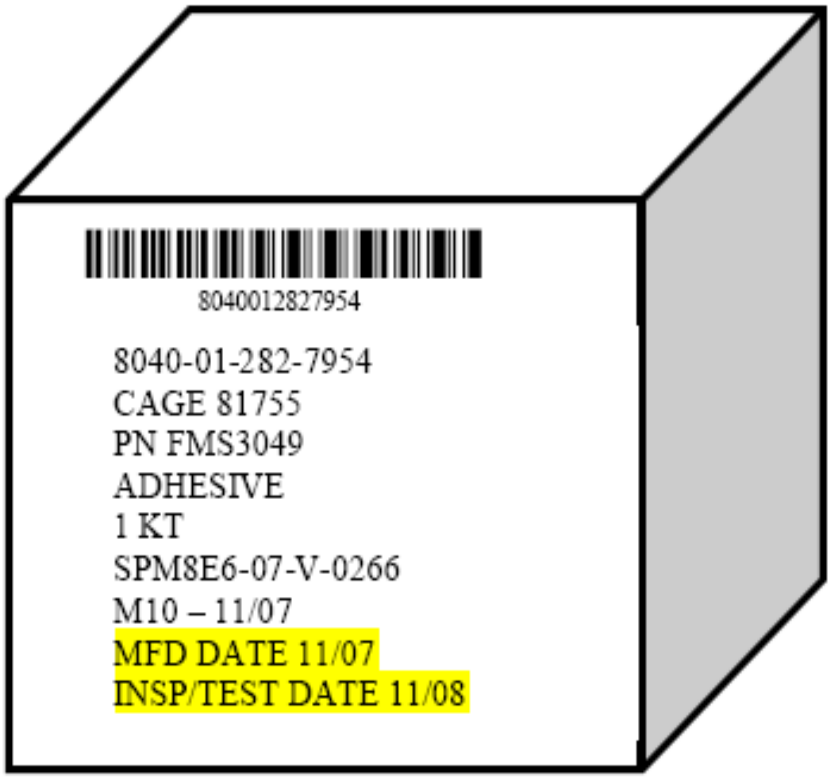
RUBBER or ELASTOMER (TYPE II):

CURED DATE 4Q01
INSP/TEST DATE 4Q05

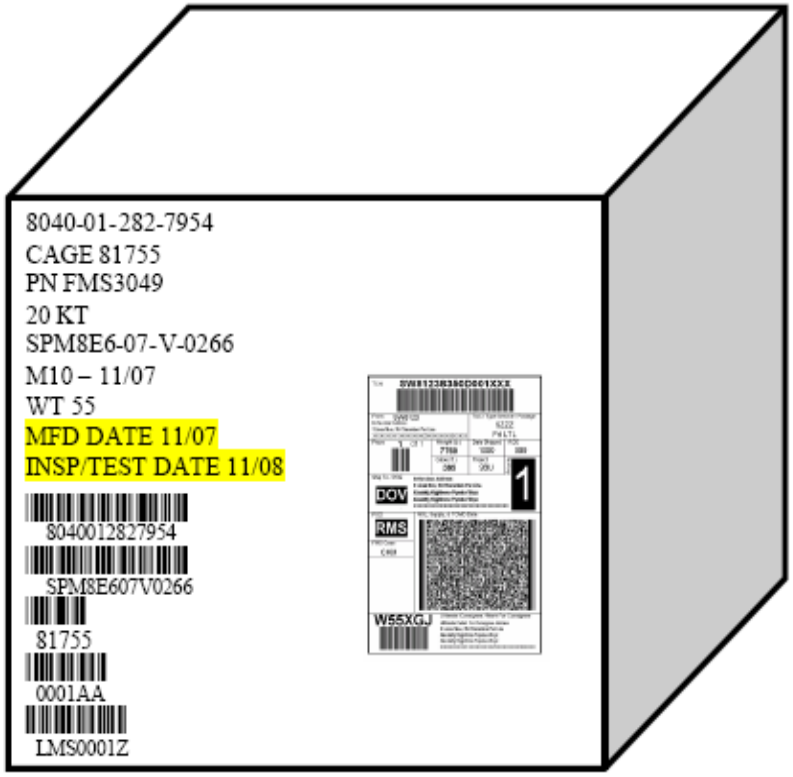
Special Markings

Shelf-life

Unit Pack Container



Exterior



Special Markings

Project Code

Special Markings

Special Handling

Special Markings

Method 50

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Special Markings

Expedited Handling

Special Markings

Electrostatic Discharge (ESD) Sensitive

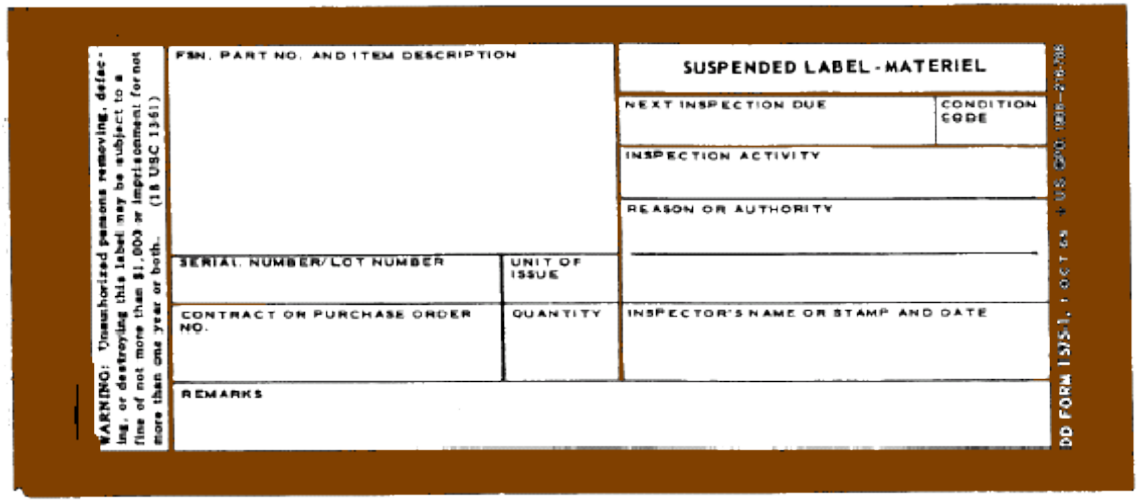
Unit Packs

Intermediate &

Exterior Container

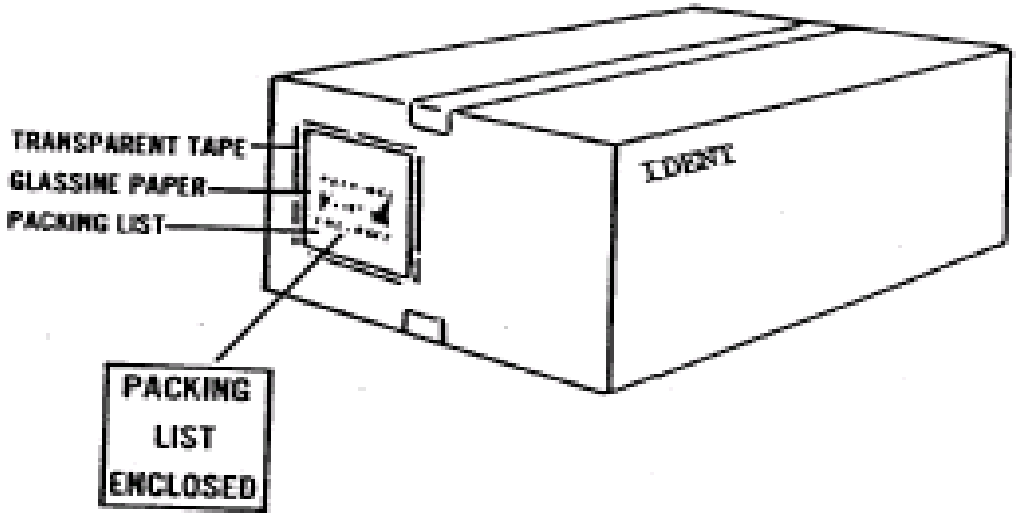
Special Markings

- **Material Condition Markings Tags/Labels**
  - **DD Form 1574 Serviceable Yellow**
  - **DD Form 1577-2 Unserviceable – Reparable Green**
  - **DD Form 1577 Unserviceable – Condemned Red**
  - **DD Form 1575 Suspended Brown**
  - **DD Form 1576 Test Modification Blue**


WARNING: Unauthorized persons removing, defacing, or destroying this label may be subject to a fine of not more than $1,000 or imprisonment for not more than one year or both. (18 USC 1361)
FSN, PART NO. AND ITEM DESCRIPTION
SUSPENDED LABEL - MATERIEL
NEXT INSPECTION DUE
CONDITION CODE
INSPECTION ACTIVITY
REASON OR AUTHORITY
SERIAL NUMBER/LOT NUMBER
UNIT OF ISSUE
CONTRACT OR PURCHASE ORDER NO.
QUANTITY
INSPECTOR'S NAME OR STAMP AND DATE
REMARKS
DD FORM 1575, 1 OCT 65

Documentation

- **Packing Lists**
  - **Sets, kits or assemblies composed of unlike items but identified by a single stock number or part number shall have a packing list identifying each item securely attached to the end or side of the cont**



Documentation

- **Other Documentation that may be required**
  - **DD 250 – Material Inspection & Receiving Report**
  - **DD Form 1155 – Order for Supplies & Services**
  - **DD Form 1384 – Transportation Control & Movement Document**
  - **DD Form 1149 – Requisition & Invoice Shipping Document**
  - **DD Form 1348-1 – Issue Release/Receipt Document**

Documentation

- **Direct Vendor Delivery (DVD) shipment documentation requires additional bar codes**
  - **Document (Requisition) number & suffix if applicable**
  - **13 digit NSN plus additional codes if applicable**
  - **Inventory Control Point Routing Identifier Code (RIC), Unit of Issue, Quantity, Condition Code, Distribution Code & Unit Price**
- **Bar codes placed on the DD 250 or commercial packing list**
- **Applicable to shipments "to a location other than a DLA Distribution Depot"**

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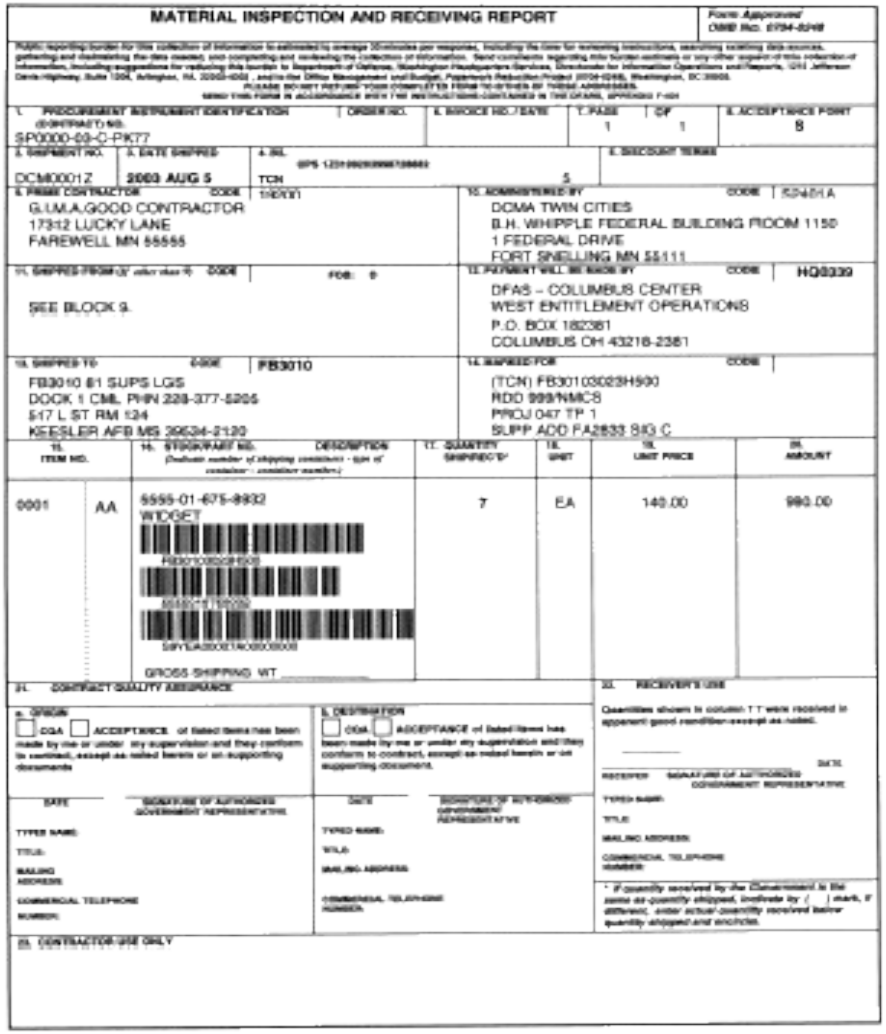
Documentation



MATERIAL INSPECTION AND RECEIVING REPORT

Form Approved OMB No. 0704-0248

1. PROCUREMENT INSTRUMENT IDENTIFICATION (CONTRACT) NO.: SP0000-03-C-PK77 | ORDER NO. | 4. INVOICE NO./ DATE | 5. PAGE 1 | OF 1 | 6. ACCEPTANCE POINT: S

2. SHIPMENT NO.: DCM00012 | 3. DATE SHIPPED: 2003 AUG 5 | 4. B/L: TCN | 5. DISCOUNT TERMS

6. PAYEE/ CONTRACTOR | CODE 1HEK1
G.U.M.A.GOOD CONTRACTOR
17312 LUCKY LANE
FAREWELL MN 55555

10. ADMINISTERED BY | CODE S2404A
DCMA TWIN CITIES
B.H. WHIPPLE FEDERAL BUILDING ROOM 1150
1 FEDERAL DRIVE
FORT SNELLING MN 55111

11. SHIPPED FROM (if other than 7) | CODE | FOB: D
SEE BLOCK 9.

12. PAYMENT WILL BE MADE BY | CODE HQ0339
DFAS – COLUMBUS CENTER
WEST ENTITLEMENT OPERATIONS
P.O. BOX 182381
COLUMBUS OH 43218-2381

13. SHIPPED TO | CODE FB3010
FB3010 81 SUPS LGS
DOCK 1 CML PHN 228-377-5205
517 L ST RM 124
KIESLER AFB MS 39534-2120

14. MARKED FOR | CODE
(TCN) FB3010302SH500
RDD 999/NMCS
PROJ 047 TP 1
SUPP ADD FA2833 S40 C

15. ITEM NO.		16. STOCK/PART NO. (Indicate number of shipping containers - type of container - container number.) DESCRIPTION	17. QUANTITY SHIPPED/ RECEIVED*	18. UNIT	19. UNIT PRICE	20. AMOUNT
0001	AA	5555-01-675-8832 WIDGET GROSS SHIPPING WT	7	EA	140.00	980.00

21. CONTRACT QUALITY ASSURANCE

a. ORIGIN
☐ CQA ☐ ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents

DATE | SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
TYPED NAME:
TITLE:
MAILING ADDRESS:
COMMERCIAL TELEPHONE NUMBER:

b. DESTINATION
☐ CQA ☐ ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents

DATE | SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
TYPED NAME:
TITLE:
MAILING ADDRESS:
COMMERCIAL TELEPHONE NUMBER:

22. RECEIVER'S USE
Quantities shown in column 17 were received in apparent good condition except as noted.

DATE
RECEIVER SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
TYPED NAME:
TITLE:
MAILING ADDRESS:
COMMERCIAL TELEPHONE NUMBER:

* If quantity received by the Government is the same as quantity shipped, indicate by ✓ mark. If different, enter actual quantity received below quantity shipped and encircle.

23. CONTRACTOR USE ONLY

DD FORM 250, AUG 2000 | PREVIOUS EDITION IS OBSOLETE.

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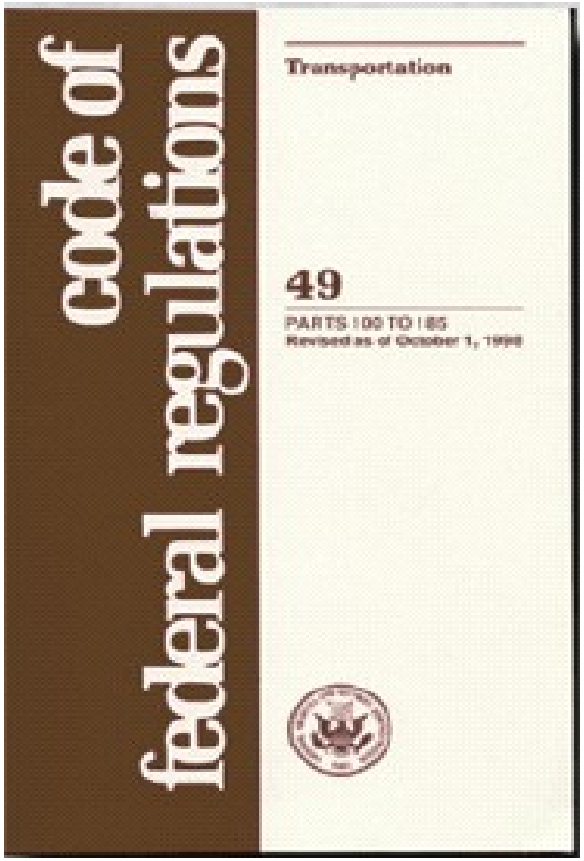
Documentation

- **Exceptions to the use of exterior container documentation**
  - **No exterior container documentation is required for containers of like items or single item packs when the contents are listed on a label attached to the boxes**
  - **Copies of the DD 250 are still required per Appendix F of the DFARS**
  - **For controlled, sensitive, classified and pilferable items (except FMS shipments), the shipping documentation shall be placed inside all containers**

Hazardous Materials

Hazardous Materials shall be marked in accordance with MIL-STD-129P W/Change 4, paragraph 5.5 & the applicable regulatory documents depending upon the mode of transportation

- **Title 49 CFR**
- **IATA Dangerous Goods**
- **IMDG**
- **AFMAN 24-204(I)**



Hazardous Materials

CFR 49 Hazardous Materials basic marking & labeling requirements

- **Proper Shipping Name**
- **UN Number**
- **Hazard Class Labels**

Hazardous Materials

UN Package Performance Specification Marking indicates the package conforms to the UN requirements

UN - Meets 49 CFR

1A1 - Closed head steel drum

X - Tested to PGI

1.8 Specific gravity

300 - Test pressure in Kilopascals (kPa)

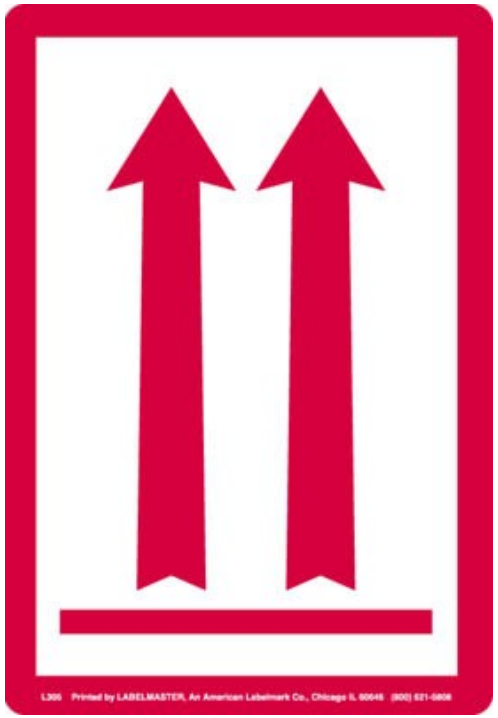
97 - Year of Mfg.

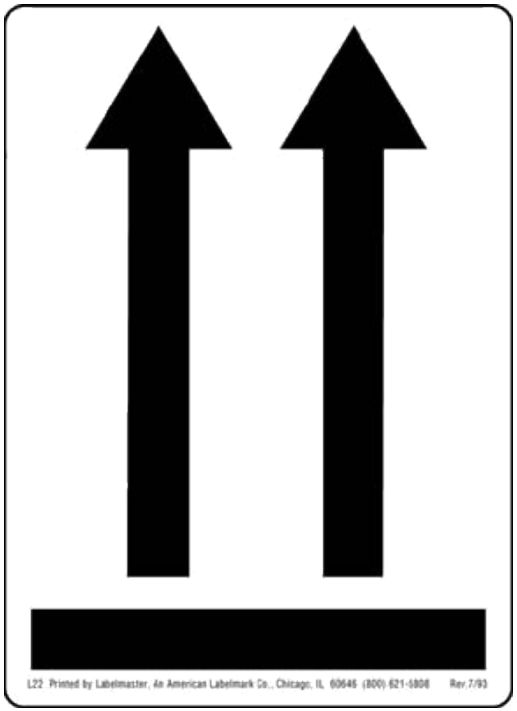
USA - Mfg. in USA to 49 CFR specs.

VL6 - Mfg. registered symbol

Hazardous Materials

Package Orientation Marking





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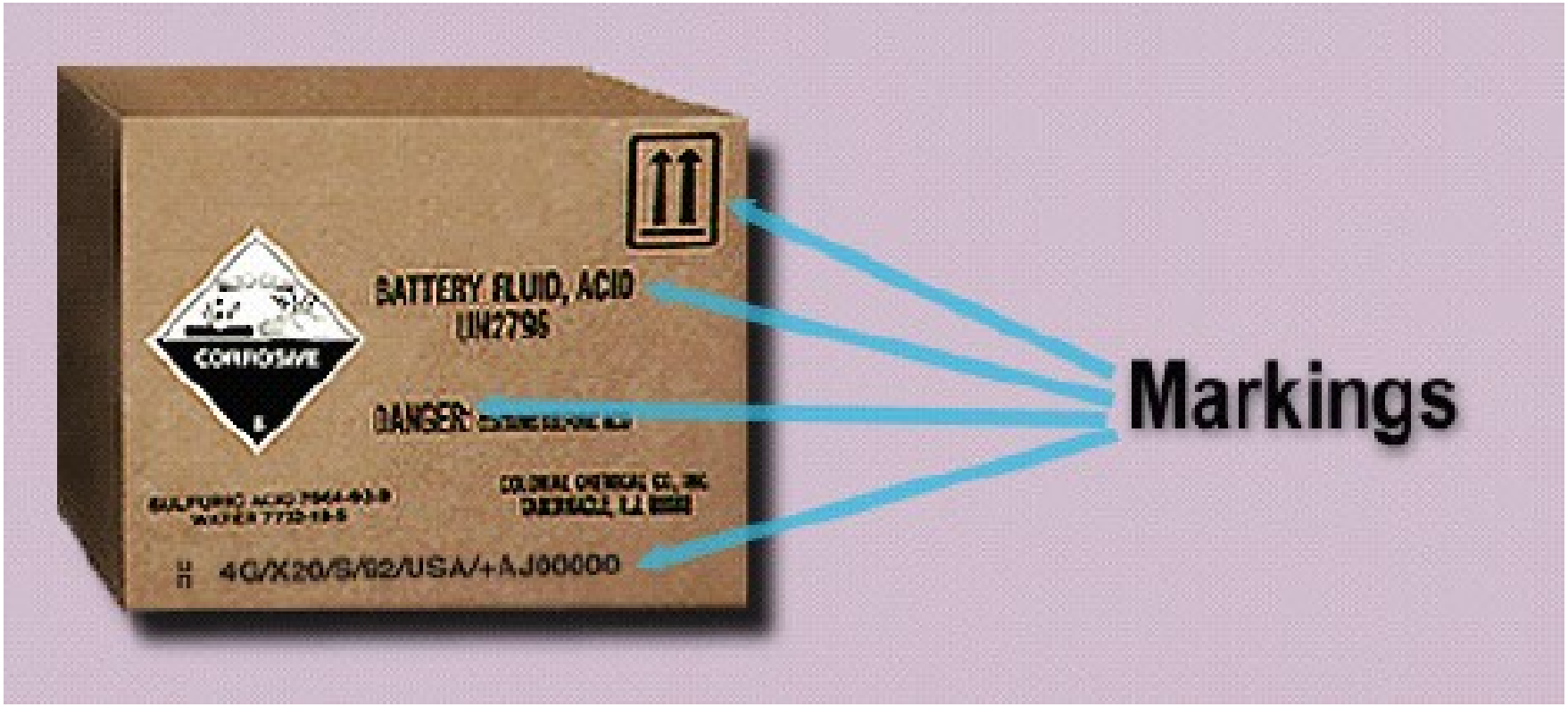
Hazardous Materials

CFR 49 Hazardous Materials basic marking & labeling requirements



Ammunition and Explosives

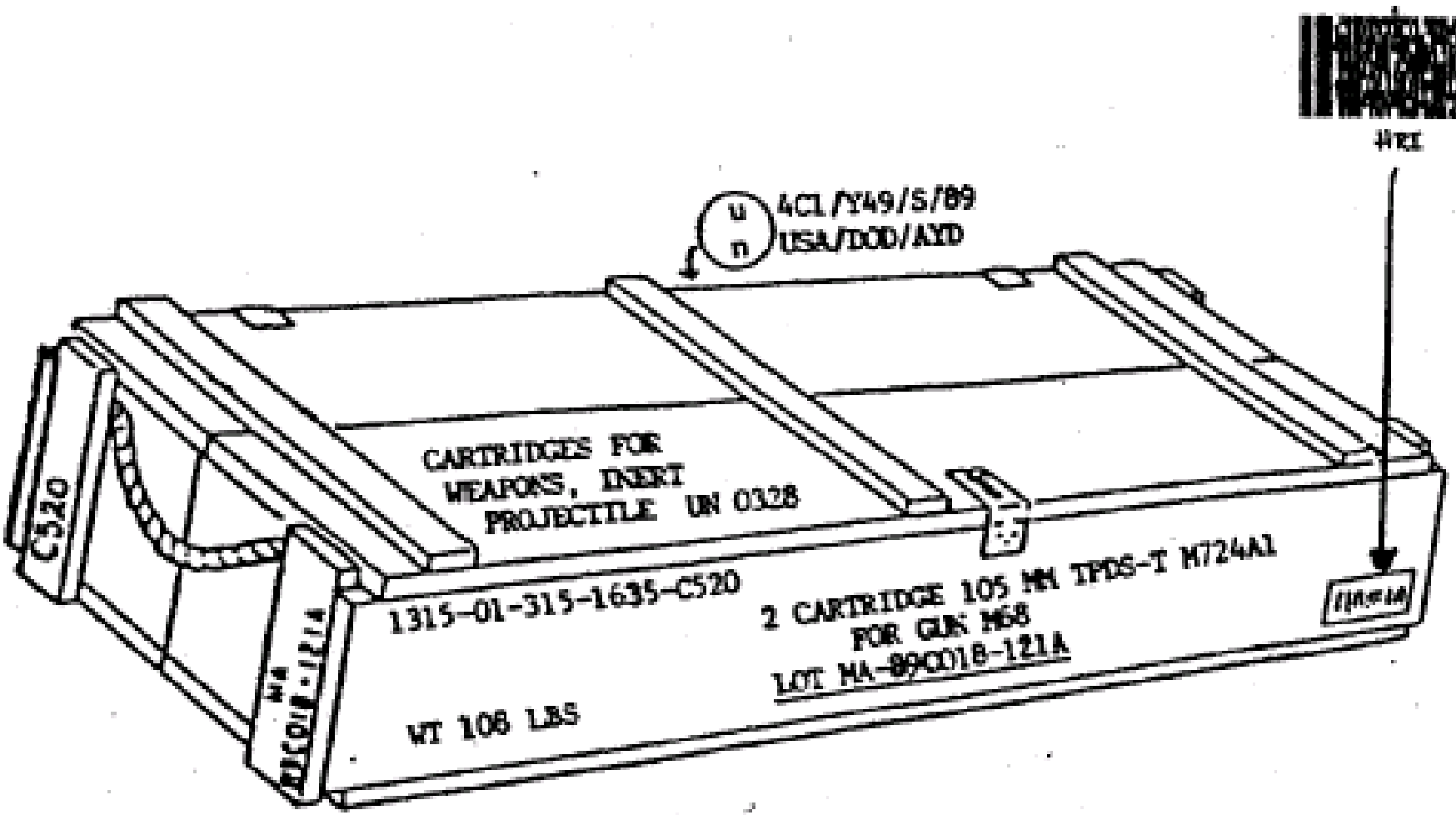
- **Identification markings on unit packs, intermediate containers & unpacked items**
  - **National Stock Number – NSN**
  - **DoD Identification Code - DoDIC/ Navy Ammunition Logistics Code - NALC**
  - **Quantity & Unit of Issue (UI other than each)**
  - **Item Description**
  - **Lot number & Serial Number (when assigned)**

- **The NSN and DoDIC are on the same line of information**
- **The quantity always precedes the item description on the same line**

Ammunition and Explosives

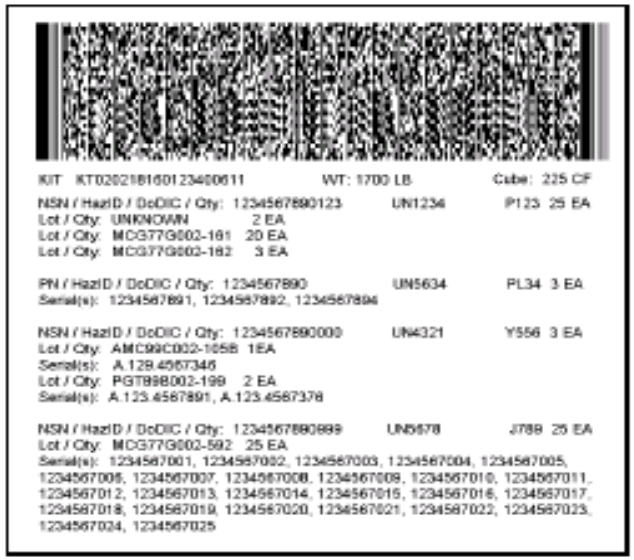
- **Identification markings on exterior containers includes all of the information required on inner containers plus:**
  - **Weight**
  - **Proper shipping name & UN Identification Number**
  - **Special Markings**
    - **Precautionary markings**
    - **HAZMAT Labels**
  - **DoDIC/NALC & Lot Number (end of container)**
  - **Lot Number (side of container)**
  - **UN Performance Specification Markings**

Ammunition and Explosives



Ammunition & Explosives

Ammunition Bar Cod



- **Identification bar code symb marking requirements**
  - **Two Dimensional Bar code PDF4**
  - **No requirement for linear bar c**
  - **Labels shall meet the requirements for grade A, style 2, composition B per MIL-PRF-61002**
  - **Labels shall be no greater than 4 x 4 inches square**

Ammunition and Explosives

- **Identification bar code symbol data structure**
  - **Package & Unit Load generic information**
    - **Label Traceability Code**
    - **Weight and Unit of Measure**
    - **Cube with Unit of Measure**
  - **Data elements encoded for each NSN**
    - **NSN**
    - **DoDIC/NALC**
    - **Quantity/Unit of Issue**
    - **Lot Number(s)**
    - **Serial Number**
    - **UN Code – UN Identification Number**

Ammunition and Explosives

- **Identification bar code human readable information**
  - **All encoded data elements shall be printed as human readable**
    - **Human readable information is not a substitute for identification markings**
    - **It shall be a literal interpretation of the data encoded in the 2D**
    - **The label traceability code will be translated as follows:**
      - The unit of measure is translated and printed
      - The 20 character code will be printed
      - The last two characters will be printed to show the label set relationship – 1 of 2, 2 of 2.

Web Sites

- **DOD Specifications & Standards**
  - **http://assist.daps.dla.mil/quicksearch/**
- **DOD Hardcopy Forms and Labels**
  - **https://forms.daps.dla.mil/**
- **DLA Packaging Web Site**
  - **http://www.dscc.dla.mil/Offices/packaging/**
- **DCMA Portal Packaging Management Community**
  - **http://home.dcma.mil/**

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Summary

- **MIL-STD-129, “Military Marking for Shipment and Storage” provides detailed descriptions of the minimum Military Package markings including Identification Markings, Military Shipment Label, Radio Frequency Identification (RFID), Special Markings, Documentation, Hazardous Materials, Ammunition & Explosives**
- **MIL-STD-129 marking can apply to Military & Commercial Packaging**

Quiz

1. **Basic Identification Marking for unit packs must include:**
   a. **Gross Weight**
   b. **Cube**
   c. **Military Shipment Label**
   d. **Quantity & Unit of Issue**
   e. **Project Code Labels**

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Quiz

2. **Exterior Container Bar Code requirements include all of the following except:**
   a. **CAGE Code**
   b. **Part Number**
   c. **Contractor Shipment Number**
   d. **NSN**
   e. **Contract Number**

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Quiz

3. The Military Shipment Label may be described in general terms as:
   a. Special Handling Label
   b. Shipment Content Label
   c. Hazard Warning Label
   d. Identification Bar Code Label
   e. Address Label

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Quiz

4. **Passive Radio Frequency Identification (RFID) tags are to be applied to:**
   a. **Shipping Cases**
   b. **Pallet Loads**
   c. **Shipping Cases within a Pallet Load**
   d. **All of the above**
   e. **None of the above**

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Quiz

5. **Shelf Life Markings indicate:**
   a. **How long the item has been left on the shelf**
   b. **The expected service life of an item**
   c. **The expected storage life of an item**
   d. **How much Shelf space the item will need**
   e. **What storage conditions are required**